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Commentary

Palliative care and interventional radiology for older adults during the COVID-19 pandemic

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Introduction

Given the limitations imposed by the COVID-19 pandemic vis-à-vis limited and inaccessible healthcare services, the poor health conditions of older patients become even more exacerbated. Due to their underlying comorbidities and higher risk of developing peri and post-operative complications, older patients may be poor anesthetic candidates and are usually denied surgical treatments [1]. Hence, frontline minimally invasive therapeutic procedures that are alternatives or may serve as adjuncts to traditional surgical treatments are becoming all the more critical in the curative or palliative management of older, frail patients with multiple comorbidities. Meanwhile, interventional radiology (IR) plays a prominent role in palliative care. IR procedures and techniques provide effective palliative treatment options that can help alleviate the pain and distress of sick patients. However, the Worldwide Hospice Palliative Care Alliance (WHPCA, cited by [2] reported that around 18 million people, which include older adults, die with avoid-

able pain and suffering due to lack of access to pain medications and other essential medicines, lack of health professionals trained in palliative care, few national-level policies, weak government commitment, and a lack of funding for training and implementation.

Palliative care as an essential health care intervention

Palliative care plays an essential role in patients' existential experience [3] and psychological support [4], as well as in supporting triage and complex decision making [4]. Palliative interventions include a full range of potential therapies such as medical, surgical, and interventional procedures, radiation therapy, and chemotherapy [5]. As such, the role of primary care becomes more complex in providing "comfort" or "end-of-life" care to improve patient suffering and return them to an acceptable level of quality of life [6].

The use of palliative care has rapidly grown in the past years. According to the World Health Organization report [7], an estimated 40 million people each year need palliative care, of which 78% live in low- and middle-income economies and is expected to double by 2060. The Worldwide Hospice Palliative Care Alliance [8] reported 56.8 million people of all ages need palliative care worldwide, the majority of which comes from aged 70 years or older (40%) and aged 50-69 (27%), respectively. Notably, millions of patients worldwide suffer and die without access to palliative care. In a study by Connor et al. [9], about 75% of the world population live in countries with no or very limited access to controlled substances for pain relief, and almost 80% of the need for palliative care is in low and middle-income economies.

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According to Webster et al. [10], between 7,000 to 8,000 palliative care services in over 100 countries are available worldwide, such as community-based teams, inpatient units, and daycare centers. For instance, Uganda, Kenya, and Malawi have delivered three palliative care programs in the context of poverty through different models, namely (1) Home-Based Care Charitable Trust program; (2) Kitovu Mobile palliative care service, and (3) Maua palliative care program by attempting to retain a holistic approach, acknowledge patients' significant physical and social needs and provide psychological and spiritual support among patients with extreme sufferings. Given the positive change of these interventions, palliative care is still only available to less than 5% of those in Africa who need it [11].

As the aging population grows, several palliative care supports are likely required for some illnesses and clinical syndromes, such as patients with multiple comorbidities, chronic progressive conditions with long disease courses, diseases with complex symptoms, and demographic changes [12]. A study by Sjöberg et al. [13] mentioned that compared to younger people, older adults have unmet symptoms and needs at the end of life, including pain, weakness, emotional distress, and anxiety, to the same levels as people with cancer. Despite the increase in palliative care access, previous scholars have indicated that older adults were the least likely to be cared for by the Palliative Care Programs [14,15]. Such information is vital for policymakers and healthcare providers to make sound decisions for effective interventions.

Providing such care relieves pain and suffering and enhances the quality of life (QoL) for patients and their families through effective symptom control [16-19]. In the United Kingdom, palliative care for the older age group has become a top priority for public health [20]. Palliative care provides better outcomes and a holistic approach of comforting in the early diagnosis of the disease until end-of-life care. However, the means to provide quality end-of-life care for older people remain one of the biggest challenges [21]. Recent studies have indicated that frail older adults with multimorbidity and life-limiting diseases such as cardiovascular, respiratory, and cancer are at particular risk of intensive care unit admissions [22]. They experience chronic pain [23] and are at a higher risk of dying due to disease [24].

Role of interventional radiology (IR) in palliative care

The scope of IR has evolved dramatically. In recent years, IR procedures have become relevant to alleviate chronic pain [25] associated with a life-limiting illness. Due to the rapid advancement of technology in medicine, there is a significant shift from conventional to minimally-invasive therapies. With its allied subspecialties, such as medical, surgical, and radiation oncologists, the practice of IR is now considered the "fourth pillar of oncology" [26].

The need for general anesthesia, prolonged stay in the hospital, and the discomfort associated with recovery after a surgical operation are significant impacts of IR on the palliation of patients with irresectable malignant tumors [28] Table 1. presents some IR procedures and techniques in older adults,

Table 1
IR procedures in older adult treatments and effective palliative IR techniques.

IR procedures in Older Adults [1]	IR Techniques in Palliative Care [27]
<ul style="list-style-type: none"> • hepatobiliary interventions in malignancy • percutaneous urinary tract procedures in obstructive nephropathy • carotid stenting of atherosclerotic extracranial carotid disease • interventional therapy of deep venous thrombosis and pulmonary embolism • various interventions for chronic pain relief 	<ul style="list-style-type: none"> • paracentesis • thoracenteses • biliary drains • nephrostomies • percutaneous ablative procedures

which are effective palliative treatment options that can alleviate pain and other distressing symptoms for patients with chronic conditions.

Undeniably, radiological technologists (RTs) play a significant role in palliative care for severely ill patients. They are clinically involved in palliative care services and IR. Those with advanced clinical expertise and knowledge of the field could address a potential gap in service provision for patients requiring palliative radiotherapy [29]. Moreover, their involvement can support clinicians in ensuring the safe and efficient management of patients' palliative therapy [30].

According to the Society & College of Radiographers (SCoR) [31], RTs are responsible for delivering fast and reliable diagnoses of disease, including curative and palliative treatment and care for patients with cancer. They are healthcare professionals with specific qualifications required to provide health benefits in imaging and electromedical diagnostics and therapeutic procedures such as radiotherapy and interventional radiology [32]. In particular, along with interdisciplinary teams including doctors, nurses, pharmacists, and other healthcare professionals, RTs are equally important in providing supportive care, palliative care, and end-of-life care.

Palliative care and IR for the older adults in a time of COVID-19 pandemic

Providing quality end-of-life care for older people in times of a pandemic is one of the biggest challenges healthcare systems face. According to the United Nations [33] 2020, COVID-19 presents a spectrum of significant risks for older persons, putting them in more distressing situations such as vulnerability and neglect, unstable social and economic wellbeing, and a higher risk between life and death. Given this reality, evidence suggests a surge in demand for palliative care services for older adults during the COVID-19 pandemic.

Clinicians have introduced significant management adjustments for best practices and patient outcomes during the COVID-19 pandemic. The radiology department is one of the essential components of the healthcare system in providing diagnostic imaging and interventional expertise to other specialties. For Gogna et al. [34], potential roles for IR directly related to patients with COVID-19 infection include vascular access (central venous lines, distal perfusion catheters for extracorpo-

real membrane oxygenation) and drainage of pleural or peritoneal fluid collections.

In the United Kingdom, IR has continued its adaptability and unique skillset in supporting other specialties to provide emergency and palliative management throughout the pandemic such as vascular access, abdominal drainages, peripheral vascular intervention and nephrostomies ureteric stenting [35]. In addition, the United States reported an overall increase in the number of requests for gastrostomy tube catheters, peritoneal dialysis, and ultrasound-guided interventions such as paracentesis, central catheter placement, and abscess drainage [36]. Such a caseload of documented IR procedures during COVID-19 demonstrates the significant role of IR in providing diagnostic, therapeutic, and palliative management during system-wide crises.

In the Philippines, there is a proportionate increase in the aging population and healthcare needs. In 2015, the share of the Filipino population older than 65 was about 4.6 percent and was forecasted to reach 25.6 percent by 2100 [37]. The world's aging population, coupled with the rising incidence of communicable and non-communicable diseases, results in the annual rise in demand for end-of-life and palliative care services. In October 2021, the Philippine Department of Health led the National Hospice and Palliative Care Month's observance (NHPCM) with a theme "Leave no one behind. Equity in access to palliative care". Such policy aims to integrate palliative care into our healthcare system [38].

Besides Bangladesh, Ethiopia, Jordan, Panama, and Ukraine, the Philippines is one of the countries chosen by the Worldwide Hospice Palliative Care Alliance (WHCPA) to focus on building palliative care. Alarmingly, the Philippines is one of the many low and middle income economies in the Asia Pacific Region, with little and no research output on Geriatric Palliative care in 2018 [39].

Mainstreaming the practice of palliative care and IR among RTs

While the COVID-19 pandemic highlights the importance of palliative care and IR, especially for older adults, it remains necessary to clarify these concepts as they remain unfamiliar for both patients and other allied health practitioners. Palliative care and IR need further mainstreaming, especially among the RTs in the Philippines. This can be done in several ways, first is by increasing awareness of the benefits of palliative care and IR. It is therefore important to encourage RTs to carry out and disseminate their research findings on how palliative care and IR alleviate the pain and suffering of vulnerable populations in the Philippines. Likewise, understanding the role of IR in the palliation of chronic, life-limiting diseases remains a researchable area.

Second, mainstreaming palliative care and IR among RTs in the Philippines entails effectively implementing the policies, standards, and guidelines for Radiologic Technology Education, which were adopted and promulgated by the Commission on Higher Education (CHED) in 2017 [40]. Palliative care and IR should be made more explicit in the RTs' curriculum. Doing

so could result in an increase in knowledge and awareness when they enter practice. Third, there is also a need to understand the interprofessional collaboration between palliative care and IR [41,42]. Skills development and continuous professional development programs will greatly capacitate RTs in collaborative decision-making toward providing effective healthcare support system for the vulnerable older adults.

In conclusion, palliative care and IR are part of the universal health coverage in promoting UN Sustainable Development Goals for prevention, promotion, treatment, rehabilitation, and palliation [43]. Thus, a greater number of Filipino healthcare professionals such as the RTs need to be trained, guided, and immersed in the education and practice of these fields to meet the service demands required for palliative care in the Philippines, especially as needs continue to rise due to the COVID-19 pandemic.

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